

Claim Amendments

Claims 1-13 (Canceled)

14. (Currently Amended) A process for producing aligned carbon nanotube films, which consists essentially of:

(i) forming wherein a carbon compound is decomposed using a substrate that is obtained by depositing aluminum on coating a ceramic sheet with an aluminum film to form an aluminum-deposited coated ceramic sheet, (ii) next loading an aqueous solution or suspension of a metallic catalytic compound on said aluminum-deposited coated ceramic sheet, and then (iii) calcining the resulting ceramic sheet to convert said metallic catalytic compound to a catalytic metal oxide, and (iv) decomposing a carbon compound on said substrate form said substrate, thereby forming a film of carbon nanotubes on the surface of said substrate which are aligned in a direction perpendicular to said substrate, wherein said ceramic sheet is a porous silica-alumina sheet.

15. (Previously presented) The process according to claim 14, wherein the metallic catalytic compound is at least one member of the group consisting of a metallic nitrate, a metallic chloride, a metallic fluoride, a metallic bromide, a metallic iodide, a metallic sulfate, a metallic carbonate, a metallic acetate, a metallic naphthenate, a metallic octacarbonyl, a metallic phthalocyanine, a metallic hydroxide and a metallic oxide.

16. (Currently amended) The process according to claim 14, wherein the metallic catalytic compound is ~~a suspension of~~ a metallic hydroxide obtained by adding a base to an aqueous solution of a metallic salt, wherein said metallic hydroxide is in suspension.

17. (Previously presented) The process according to claim 16, wherein the metallic catalytic salt is a metallic nitrate, a metallic chloride, a metallic fluoride, a metallic bromide, a metallic iodide, a metallic sulfate, a metallic carbonate, a metallic acetate or a metallic naphthenate.

18. (Previously presented) The process according to claim 16, wherein the base is ammonia or a water-soluble amine.

19. (Original) The process according to claim 18, wherein aqueous ammonia is used as the base.

20. (Currently amended) The process according to claim 14, wherein the a metallic catalytic compound which is loaded on the aluminum-deposited ~~coated~~ ceramic sheet comprises particles with a size of 1 nm to 100 nm.

21. (Previously presented) The process according to claim 14, wherein the metallic catalytic compound is loaded by impregnation, dipping, a sol-gel process or a reverse micelle process.

22. (Previously presented) The process according to claim 14, wherein the calcining temperature is between 300 and 800°C.

Claims 23-24 (Canceled)

25. (Previously presented) The process according to claim 14, wherein the ceramic sheet is heated to dry before aluminum is deposited.

26. (Previously presented) The process according to claim 14, wherein aluminum is deposited by vacuum deposition, electrochemical deposition or sputtering.

Claims 27-31 (Canceled)

32. (Currently amended) A process for producing aligned carbon nanotube films, wherein a carbon compound is decomposed, which process consists essentially of using a substrate that is obtained by loading a cobalt compound on an aluminum-~~deposited~~ ~~coated~~ ceramic sheet, said cobalt compound being a suspension of cobalt hydroxide obtained by adding a base to an aqueous solution of a cobalt salt, and calcining the cobalt compound-loaded ceramic sheet, thereby forming a film of carbon nanotubes on the surface of said substrate which are aligned in a direction perpendicular to said substrate, wherein said ceramic sheet is a porous silica-alumina sheet.

33. (Previously presented) The process according to claim 32, wherein said cobalt salt is cobalt nitrate, cobalt chloride, cobalt fluoride, cobalt bromide, cobalt iodide, cobalt sulfate, cobalt carbonate, cobalt acetate or cobalt naphthenate.

34. (Previously presented) The process according to claim 33, wherein the base is ammonia or a water-soluble amine.

35. (Previously presented) The process according to claim 34, wherein aqueous ammonia is used as the base.

36. (Previously presented) The process according to claim 14, wherein the metallic catalytic compound is at least one member of the group consisting of a cobalt compound, a nickel compound, an iron compound, a platinum compound, a molybdenum compound and a ruthenium compound.

37. (Previously presented) The process according to claim 14, wherein the metallic catalytic compound is at least one member of the group consisting of a cobalt compound, a nickel compound and an iron compound.

38. (Previously presented) The process according to claim 14, wherein the metallic catalytic compound is a cobalt compound.

39. (Previously presented) The process according to claim 14, wherein the carbon compound is at least one member of the group consisting of a saturated hydrocarbon compound, an unsaturated hydrocarbon compound, an aromatic hydrocarbon compound and an oxygen-containing compound.

40. (Previously presented) The process according to claim 14, wherein the reaction temperature for the step of decomposing the carbon compound is between 400° and 1100°C.